

4.12 LAND USE AND PLANNING

This section identifies the existing land uses within the Project area and the potential land use impacts from the Project. Also included in this section is a discussion of the designated land uses traversed by the existing pipeline and potential conflicts with land use plans and policies.

4.12.1 Environmental Setting

The existing pipeline traverses 304 miles in southeastern California and crosses into southwestern Arizona. The pipeline runs through three counties and several cities and towns in California, as well as one county in Arizona. This large area involves multiple landowners and a variety of land uses.

Land use types were determined from interpretation of aerial photographs and examination of general plans, specific plans, and zoning maps from Kern, San Bernardino, Riverside, and La Paz Counties; and city planning documents from the City of Barstow and the City of Blythe. Additional information was obtained through inquiries to city and county planning employees and field reconnaissance by ENTRIX staff.

The pipeline crosses lands owned by Federal, State, and county agencies and private parties. A total of approximately 122.5 miles of the existing pipeline are situated on BLM-administered lands that are primarily used as rangeland for livestock. Approximately 176 miles of the pipeline are located on private lands. The pipeline also crosses 7 miles of California State School lands, 0.5 acres of California State Sovereign lands, and 3.6 miles of Department of Defense land at Edwards Air Force Base. Table 4.12-1 lists public land ownership by milepost and current land use for Line 1903.

Sixty percent of the land crossed by the Cadiz Lateral is public land managed by BLM. Forty percent is privately owned. The Union Pacific Railroad owns a significant portion of the private land.

Table 4.12-1. Construction Requirements on Public Land by Milepost and Current Land Use

Milepost	Landowner	County, State	Construction Requirements (acres)	Current Land Use(s)
26.00	Tehachapi School District	Kern County, CA	0.69	Residential
52.32	Bureau of Land Management (BLM)	Kern County, CA	0.69	Rangeland
94.50	BLM	San Bernardino, CA	0.69	Rangeland
109.80	BLM	San Bernardino, CA	0.69	Rangeland
126.00	San Bernardino County Flood Control District	San Bernardino, CA	0.69	Commercial
132.10	BLM	San Bernardino, CA	9.18	Rangeland
149.10	BLM	San Bernardino, CA	0.69	Rangeland
154.90	BLM and San Bernardino County	San Bernardino, CA	0.69	Rangeland
163.90	BLM	San Bernardino, CA	0.69	Rangeland
169.39	BLM	San Bernardino, CA	0.69	Rangeland
169.56	BLM	San Bernardino, CA	3.56	Rangeland
173.80	BLM and San Bernardino County	San Bernardino, CA	0.69	Rangeland
173.99	BLM	San Bernardino, CA	0.69	Rangeland
175.00	BLM	San Bernardino, CA	0.69	Rangeland
177.30	BLM	San Bernardino, CA	0.69	Rangeland
180.45	BLM	San Bernardino, CA	0.69	Rangeland
188.70	BLM	San Bernardino, CA	0.69	Rangeland
197.82-204.76	BLM	San Bernardino, CA	2.76	Rangeland
228.00	BLM	San Bernardino, CA	0.69	Rangeland
228.60	BLM	San Bernardino, CA	0.69	Rangeland
255.00	BLM	San Bernardino, CA	0.69	Rangeland
255.78	BLM	San Bernardino, CA	0.69	Rangeland
261.60	BLM	Riverside, CA	0.69	Rangeland
266.12	BLM	Riverside, CA	0.69	Rangeland
267.00	BLM	Riverside, CA	0.69	Rangeland
276.00	BLM	Riverside, CA	0.69	Rangeland
279.47	BLM	Riverside, CA	0.69	Rangeland
285.00	BLM	Riverside, CA	0.69	Rangeland
286.30	BLM	Riverside, CA	0.69	Rangeland
300.00	Riverside County	Riverside, CA	0.69	Agriculture
		TOTAL	34.13	

As indicated in Table 4.12-2, the majority of land use that is currently crossed is rangeland comprising 257.5 miles of the pipeline route (85.5 percent). Other land uses crossed by the existing pipeline route include 25.4 miles (8.24 percent) of agricultural land, 10.7 miles of residential (3.47 percent), 3.0 miles of commercial (1 percent), and 5.4 miles of utility land (1.75 percent). Figure 4.12-1 depicts existing land uses along the ROW. Agricultural resources, including rangelands and cultivated agricultural lands, are further discussed in Section 4.3 Agricultural Resources.

Table 4.12-2. Summary of Land Use Traversed by El Paso Line 1903

	Agriculture (miles)	Rangeland (miles)	Residential (miles)	Commercial (miles)	Utility¹ (miles)	Total (miles)
Pipeline Conversion Project	25.4	257.5	10.7	3.0	5.1	301.7
Cadiz Lateral	NA	6.1	NA	NA	0.3	6.4
Total (miles)	25.4	263.6	10.7	3.0	5.4	308.1

Note:

The Utility land use includes highways, railroad, and existing pipeline ROW.

Designated Land Use

Every city and county in California has adopted a general plan to set forth policies guiding local land use development. Each general plan contains a map that identifies the location of allowable land uses. These designated land use maps not only identify existing land uses, but also future potential uses of lands.

Figure 4.12-2 depicts the designated land uses along the ROW. For reference, this map also depicts the hazard class ratings discussed in Section 4.6-1, Hazards and Public Safety.

The existing pipeline traverses lands in Riverside County that are administered by the City of Blythe General Plan, Palo Verde Valley Area Plan, and Riverside General Plan. Designated land uses crossed include agriculture, open space-rural, and open-space rural-desert. In San Bernardino County, the existing pipeline crosses lands designated

as resource conservation, agriculture, rural living, regional industrial, neighborhood/commercial, residential/commercial and general commercial. Designated land uses for San Bernardino County are set forth in the San Bernardino County General Plan. In Kern County, the pipeline traverses land administered by the 2003 Kern County General Plan, the 1984 Boron Specific Plan, and the 1984 Stallion Springs/Phase II Horsethief Flats Specific Plan. Designated land uses traversed in Kern County include agriculture, resource reserve, open space, residential, public facilities and services, park and recreation, mineral and petroleum, industrial and commercial.

4.12.2 Regulatory Setting

Federal

The BLM is the Federal agency responsible for considering a ROW grant, or ROW grant amendment, for construction and operation of the Project on BLM-administered lands. The BLM considers conformance with land use plans and impacts on resources and programs in determining whether to issue a new or amended ROW grant. The existing pipeline lies within the California Desert Conservation Area (CDCA) boundary. The BLM has prepared the CDCA Plan, a comprehensive, long-range plan for the management, use, development, and protection of the public lands within the California Desert Conservation Area. The Plan takes into account the principles of multiple use and development, including, but not limited to, maintenance of environmental quality, rights-of-way, and mineral development. The Plan has multiple-use class designations and resource management guidelines for all public lands in the CDCA. Four multiple-use classes are used in the Plan based on the sensitivity of resources and kinds of uses for each geographic area. Most of the Project would traverse lands classified by the BLM as Class M. According to the CDCA Plan, lands classified as Class M (moderate use) can be used for energy production and utility corridors; however, any damage that permitted uses cause must be mitigated.

As a second component of the Plan, 12 Plan elements have been prepared that provide a desert-wide perspective of the planning decisions for one major source or issue of public concern. Each element also provides more specific application, or interpretation, of multiple-use class guidelines for a given resource and its associated activities. The 12 Plan elements consist of the following:

Cultural Resource

Native American Values

Wildlife

Vegetation

Wilderness

Wild Horses and Burros

Livestock Grazing

Recreation

Motorized-Vehicle Access

Geology-Energy Minerals

Energy Production and Utility Corridors

Land Tenure Adjustment

The Livestock Grazing Plan Element is discussed in the Section 4.3 Agricultural Resources, and the Wilderness, Recreation, and Motorized-Vehicle Assess Plan Elements are discussed in Section 4.14 Recreation.

The Energy Production and Utility Corridors Element is directly applicable to the Project. The goal of the Energy Production and Utility Corridors Element is to implement a network of joint-use planning corridors to meet projected utility needs and to minimize the number of separate rights-of-way by utilizing existing rights-of-way as a basis for planning corridors. The utility planning corridors specifically address the expansion of utility facilities constructed for the purpose of telecommunications and bulk transfers of electricity, gas, water, petroleum, and other commodities. Expansion is defined in this element as “the addition, construction, or major modification of a tower, pipeline, canal,

or cable to accommodate the transfer of additional products” (BLM, 1980 (as amended)).

When the AAPL was approved it was located outside of the CDCA approved corridor. BLM previously made a determination that the FEIS for AAPL concluded that the constructed route was preferable to a corridor route because it was shorter, less expensive, resulted in less significant environmental issues, and affect fewer cultural sites. As such, no plan amendment was needed. The same reasoning applies to the Project. This area includes the Cadiz Lateral.

The Department of Defense has regulatory authority over the 3.6 miles of land at Edwards Air Force Base crossed by the pipeline. Because this is a military installation, this land would not be available for civilian recreational opportunities.

State

The CEQA requires that significant environmental impacts are identified, including land use impacts, and that such impacts be eliminated or mitigated to the extent feasible.

Local

Local regulatory involvement for this Project includes county general plans, zoning ordinances, and specific plans. In Kern County, the pipeline traverses land administered to by the 2003 Kern County General Plan, the 1984 Boron Specific Plan, and the 1984 Stallion Springs/Phase II Horsethief Flats Specific Plan. In San Bernardino County, land use where the pipeline runs is directed by the 2002 revised San Bernardino County General Plan. The 2003 Riverside County General Plan and the 1992 Horsethief Canyon Specific Plan are governing documents in Riverside County. The City of Barstow directs land use policy with the 1997 Barstow General Plan. Finally, in the City of Blythe, the 1988 Blythe General Plan is the governing document.

4.12.3 Significance Criteria

An adverse impact on land use and planning was considered significant and would require mitigation if Project construction or operation would:

- conflict with existing land use plans, policies, or regulations established by a jurisdiction directly affected by the Project;
- conflict with any approved residential or commercial development plans, or any applicable habitat conservation plan or natural community conservation plan;
- cause long-term property damage and create construction-related hazards to residents of dwellings within 500 feet of the pipeline; or
- physically divide an established community.

4.12.4 Impact Analysis and Mitigation

EPNG would require a 100-foot-wide ROW for construction activities, comprised of a 50-foot-wide permanent ROW and an additional 50-foot-wide temporary ROW during construction. The additional space would allow equipment and crews to access work areas. The construction of the Project would affect about 217.12 acres of land including pipeline right-of-way, temporary extra workspace, and contractor/pipe storage/offloading yards. Table 4.12-3 presents a summary of land uses affected by construction and operation of the Project. During construction, about 164.96 acres of rangeland, 14.7 acres of agricultural land, 4.14 acres of rural residential, and 33.32 acres of utility land would be temporarily disturbed. Impacts to agricultural resources, including rangeland and cultivated cropland, are discussed in Section 4.3 Agricultural Resources.

Risk Of Upset

Field surveys were conducted to determine whether any residential development, especially sensitive receptors such as schools, daycare facilities, recreation facilities, churches, hospitals, and retirement communities, were adjacent to or near the existing pipeline and associated ROW. No structures were identified in the existing ROW. Table 4.6-7 identifies all structures within the impact area of the pipeline that would be at risk in the event of a major release. East of Daggett, the impact area is 630 feet on either side of the pipeline, with the exception of the higher MAOP area from MP 215.75 to MP 247.6, which has an impact area of 675 feet. West of Daggett, the impact area is 525 feet on either side of the pipeline. There are a total of 536 structures within 660 feet of the pipeline (87 structures are within 200 feet, 194 structures are within 200 to 400 feet, and 255 structures are within 400 to 600 feet). For a discussion of hazards

and public safety refer to Section 4.6 Hazards and Public Safety. Implementation of mitigation measures HAZ -1a, HAZ-1b, and HAZ-1c, could reduce the severity and likelihood of pipeline ruptures and subsequent explosions or fires, but the potential still exist for a gas line rupture and threat to public safety (Class I Impact).

Table 4.12-3. Summary of Land Use Affected by Construction and Operation

Rangeland		Cultivated Cropland		Residential		Utility		Total	
Temporary Construction Disturbance (acres)	Permanent Operation Disturbance (acres)	Temporary Construction Disturbance (acres)	Permanent Operation Disturbance (acres)	Temporary Construction Disturbance (acres)	Permanent Operation Disturbance (acres)	Temporary Construction Disturbance (acres)	Permanent Operation Disturbance (acres)	Temporary Construction Disturbance (acres)	Permanent Operation Disturbance (acres)
164.96	38.68	14.7	1.49	4.14	0.06	33.32	6.84	217.12	47.07

Of the 217.12 acres of land affected by construction of the pipeline facilities, about 47.07 would be retained as new permanent right-of-way and aboveground facilities. Of the 47.07 acres permanently retained, 38.68 acres are rangeland, 6.84 acres are utility land, 1.49 acres are agriculture, and less 0.06 acre are residential.

The temporary and permanent use of existing utility lands is a consistent use of the land, and no impact to these lands would occur. Residential lands would experience temporary and permanent impacts. Future maintenance of the line and a potential pipeline rupture could also impact additional residential lands. These impacts are discussed in further detail in the following subsections.

Existing Residences and Planned Developments

The existing pipeline traverses 10.7 miles of residential land. Construction activities however, would temporarily disturb 4.14 acres of residential land. Temporary construction impact on residential areas could include inconvenience caused by noise and dust generated by construction equipment, personnel, and trenching of roads or driveways; restriction of access; ground disturbance of lawns; safety issues concerning open trenches; removal of landscaping; and potential damage to existing septic systems or wells. Noise impacts to residence are discussed in Section 4.9 and dust impacts are addressed in Section 4.7.

Impact LU-1: Temporary Disturbance to Residences

Construction activities could impact residences within 500 feet of construction work areas. (Potentially Significant, Class II)

Noise, odor, construction emissions, and dust impacts could potentially disturb residences up to 500 feet from the construction work area. Implementation of mitigation measures NOI-1, AIR-1a, AIR-1b, and AIR-1c would reduce these impacts to a level of less-than-significant.

Where residential properties are directly affected by construction activities such as trenching, landscape removal, restricted access, implementation of the following mitigation measures would reduce these impacts to a level of less-than-significant.

Mitigation for Impact LU-1:

MM LU-1a. Restore Property. *EPNG would immediately replace landscaping following construction activities; repair driveways; fences or other property damaged, and restore the property to its previous condition.*

MM LU-1b. Secure Trench Area. *EPNG would install safety fencing around construction areas within 500 feet of residences and would backfill or cover open trenches at the end of each workday.*

MM LU-1c. Maintain Access. *EPNG would work with individual residents to maintain access to properties.*

Rationale for Mitigation

Proposed mitigation would increase safety in construction areas and restore residential areas to pre-construction conditions. Additionally, resident's access to their lands would be maintained. Mitigation proposed in Section 4.9, Noise, and Section 4.7, Air Quality, further reduce impacts from noise, dust, odors, and emissions to residences during construction to less than significant levels.

Impact LU-2. Permanent Conversion of Residential Land

Approximately a half of an acre of residential land would be permanently converted to industrial.

Mitigation for Impact LU-2.

MM LU-2 Compensate Land Owner. *EPNG would negotiate with the landowner at MP 33.36 to determine fair compensation for the land.*

Rationale for Mitigation

Impacts resulting from converting residential land for the Project are largely financial due to the small amount of conversion.

Planned Residential Development

It should be noted that analysis of aerial photography shows a planned residential subdivision between MP 37 and MP 41. A street network is already in place, as well as utility easements. The land has been divided into parcels, which indicates that development may occur here in the future. At present, Kern County does not have any applications on file for these parcels. Because these parcels have not been developed, no construction impacts would occur. In addition, the Blythe City Planner indicated that plans exist to build a 90-acre residential subdivision southeast of the City of Blythe (closest construction location is at MP 302.68). The pipeline would run through the middle of this subdivision; however, the city planner estimated that it would be three to five years before construction commenced due to the need for infrastructure improvements.

Operational Impacts

Impact LU-3. Future Residential Impacts

The existing pipeline traverses 10.7 miles of residential lands. A very limited number of residential acres would be disturbed by construction activities. However, after smart pigging and hydrostatic testing, there could be a need for additional repair work prior to bringing Line 1903 to natural gas service. These additional repairs could impact additional residences. Implementation of LU-1a, LU-1b, LU-1c and LU-2 would reduce these impacts to less-than-significant for residences located more than 50 feet from construction activities. If construction takes place within 50 feet, implementation of the following mitigation measures would be required to reduce impacts to less-than-significant.

Mitigation Measure for Impact LU-3.

MM LU-3 Site-Specific Mitigation Plans. *EPNG would prepare site-specific residential construction mitigation plans for all residences within 50 feet of construction activities. The site-specific plan must describe how construction impact would be minimized in residential areas, including:*

- *how and when landowners would be notified of construction activities*

- *how access and traffic flow would be maintained during construction activities, particularly for emergency vehicles;*
- *how the hazard of open ditches would be minimized when construction activities are not in progress; and*
- *how fugitive dust from construction activities would be minimized.*

In addition, EPNG must adopt or discuss why it cannot adopt, the following mitigation.

- *Mature trees and landscaping should not be removed from within the edge of the construction work area unless necessary for the safe operation of construction equipment'*
- *Immediately after backfilling the trench, all lawn areas and landscaping within the construction work area should be restored;*
- *The edge of the construction work area adjacent to the residences should be fenced for a distance of 100 feet on either side of the residence to ensure that construction equipment and materials, including the spoil pile, remain within the construction work area;*
- *Fencing should be maintained, at a minimum, throughout the open trench phases of pipe installation; and*
- *A minimum of 25 feet should be maintained between the residence and the construction work area for a distance of 100 feet on either side of the residence (e.g., the construction work area should be reduced as necessary to maintain the minimum distance).*

Rationale for Mitigation

Proposed mitigation minimizes the impact to residences from construction activity in close proximity.

Table 4.12-4 presents a summary of impacts on land use and planning and recommended mitigation measures.

Table 4.12-4. Summary of Impacts and Mitigation Measures for Land Use and Planning

Impact	Mitigation Measure
LU-1: Temporary Disturbance to Residences.	LU-1a. Restore Property. LU-1b. Secure Trench Area. LU-1c. Maintain Access.
LU-2: Permanent Conversion of Residential Land.	LU-2. Compensate Land Owner.
LU-3: Future Residential Impact	LU-3. Site-Specific Mitigation Plans.

Cumulative Impacts

All potential Project impacts related to land use would result from temporary construction activities, including temporary increases in noise and dust, decreased air quality from construction vehicles, odors from construction equipment, safety issues concerning open trenches, loss of vegetation, and access issues.

When projects are constructed at the same time, or are timed closely together, they can result in a cumulative impact. Section 5.5, Summary of Cumulative Impacts, lists project in the vicinity of the proposed Project that could contribute to cumulative impacts related to land use. The Project construction activities in the vicinity of other projects are minor and temporary, and are not expected to generate significant additional disturbance to adjoining land uses. One project at the Cadiz interconnect, the Cadiz Groundwater Storage and Dry-Year Supply Program, has been approved. Although unlikely, it is possible that this project could be built at the same time as the Cadiz interconnect. Potential cumulative impacts to rangeland and agricultural lands are discussed in Section 4.3. No residences or other planned residential developments are

within at least 1,000 feet of the Cadiz interconnect. Cumulative land use impacts therefore would be less than significant.

4.12.5 Alternatives

No Project Alternative

The No Project Alternative would not convert the former All American crude oil pipeline system to a natural gas transmission system. No temporary or permanent land use impacts associated with the conversion project would take place.

Ehrenberg to Daggett Alternative

The Ehrenberg to Daggett Alternative would not convert the portion of Line 1903 from MP 0 to MP 132.1. Temporary impacts to agricultural lands would be reduced from 14.7 acres during construction to 8.27 acres, and permanent agricultural impacts would be reduced from 1.49 acres to 0.51 acres. Temporary impacts to rangeland would be reduced from 164.96 acres to 113.21 acres, and permanent impacts to rangeland would be reduced from 38.68 acres to 38.14 acres. All construction impacts to residential lands take place within milepost 24 to milepost 41. Therefore, all construction related impacts would not occur if the portion of Line 1903 from MP 0 to MP 132.1 was not converted.

Ehrenberg to Cadiz Alternative

The Ehrenberg to Cadiz Alternative would not convert the portion of Line 1903 from MP 0 to MP 215.75. Temporary impacts to agricultural lands would be reduced from 14.7 acres during construction to 8.27 acres, and permanent agricultural impacts would be reduced from 1.49 acres to 0.51 acres. Temporary impacts to rangeland would be reduced from 164.96 acres to 82.07 acres, and permanent impacts to rangeland would be reduced from 38.68 acres to 37.15 acres. All construction impacts to residential lands take place within milepost 24 to milepost 41. Therefore, all construction related impacts would not occur if the portion of Line 1903 from MP 0 to MP 215.75 was not converted.

4.12.6 References

Chavez, Anthony. Personal communication between A. Chavez, BLM Rangeland Management Specialist and Terri Wallace, ENTRIX, Inc. Barstow, California Field Office. February 2004.

City of Bakersfield, California. November 2003. Found at www.ci.bakersfield.ca.us

City of Barstow, California. November 2003. Found at www.ci.barstow.ca.us

City of Blythe, California. November 2003. Found at www.ci.blythe.ca.us

Doran, Kevin. Personal communication between K. Doran, BLM Springs South Coast Field Office and Terri Wallace, ENTRIX, Inc. January 2004.

Kern County, California. November 2003. Found at www.co.kern.ca.us

La Paz County, California. November 2003. Found at www.co.la-paz.az.us

Riverside County, California. November 2003. Found at www.co.riverside.ca.us

San Bernardino County, California. November 2003. Found at www.co.san-bernardino.ca.us

US Census Bureau. November 2003. Found at <http://factfinder.census.gov>.